NATIONAL HOUSING TRUST

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Submitted via regulations.gov

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451 7th Street SW, Room 6106
Washington, DC 20410-0500

Re: HUD-2022-0072-0001

Dear Ms. Ross,

Thank you for this opportunity to provide comments on the Green and Resilient Retrofit Program (GRRP). Twenty organizations support these comments, including members of the Preservation Working Group (PWG). PWG is a national coalition of housing owners, developers, advocates, resident associations, and state and local housing agencies dedicated to preserving affordable housing.[1]

GRRP will succeed if HUD adopts program design best practices learned over the last ten years. Successful affordable housing retrofit programs:

- Maximize resident benefits
- Prioritize energy efficiency
- Provide comprehensive technical assistance to building owners
- Provide funding for health and safety and repair measures to maximize energy savings opportunities
- Incorporate electrification/fuel-switching measures while ensuring that resident energy burden does not increase
- Establish affordability requirements to ensure that residents benefit from the program
- Limit owners' out-of-pocket costs

Our recommendations ensure that HUD:

- Encourages wide adoption of energy-efficiency, water-efficiency, and climate-resilient measures
- Pilots innovative approaches to advance the affordable housing industry

[1] The National Housing Trust (NHT) serves as the secretariat for the PWG and convened PWG members on the topic of the GRRP, coordinating our shared response.

- Advances holistic retrofits that incorporate renewable energy and battery storage
- Delivers benefits to communities most impacted by climate change, pollution, and environmental hazards, and
- Provides a fair shot for capacity-constrained housing providers to participate in the program.

Distributing funds equitably

1. Bifurcate funds into two funding categories

GRRP should balance funding "standard" energy- and water-efficiency retrofits and more innovative and market-transforming retrofit projects.

Many affordable housing providers cannot access funds to achieve meaningful energy and carbon emission reductions. Meanwhile, other providers are ready to pilot advanced building approaches through net-zero energy retrofits, advanced building construction, microgrids, deeper climate resilience retrofits than the average building, and other such projects that can serve as national models that advance market transformation in affordable housing.

Providing two application pathways will ensure that both types of projects, standard energy retrofits and innovative and market-transforming retrofits, can compete fairly to access funding. We recommend that most funds go towards standard retrofits to target as many buildings as possible, given limited funding.

2. Implement a two-step application process for "standard" energy retrofits

HUD should require a short pre-application to ensure that applicants meet minimum eligibility criteria, followed by a full application that requires a detailed energy assessment. Under-resourced building owners who meet the minimum eligibility requirements should have access to technical assistance to develop the full application.

A "first-come-first served" application process will disadvantage under-resourced owners. Some smaller non-profit building owners may not have the resources and capacity on-hand to submit a fully designed project proposal. A two-step application ensures that capacity-constrained building owners have a fair shot at competing for funding. Building owners whose proposals reach the second stage should have the option of accessing technical assistance and support to develop full project designs within a specified timeframe.

Pre-screening applicants is a common practice in successful affordable housing retrofit programs. The NYSERDA Multifamily Performance Program (MPP) provided applicants access to a technical service provider to assist the building owner in completing the program application. The Maryland Multifamily Energy Efficiency and Housing Affordability (MEEHA) program requires basic information about building age, construction type, equipment, and lighting to screen applicants before requiring an energy audit and detailed scope of work.

3. Prioritize racial equity in project selection

To support the Biden Administration's commitment to racial equity through the Justice40 initiative, selection criteria should prioritize properties in disadvantaged communities that are marginalized, underserved, and overburdened by pollution.

Black and brown communities disproportionally bear the burden of climate change. The historic disinvestment in low-income and majority-Black neighborhoods has resulted in a lack of infrastructure to withstand climate impacts.[2] Temperatures in formerly redlined neighborhoods can be as much as seven degrees Celsius higher than in non-redlined neighborhoods. Formerly redlined neighborhoods are also at greater risk from flooding.[3]

Prioritizing and Scaling Best Practices

1. Prioritize building-level energy efficiency and water efficiency measures

HUD can prioritize energy efficiency by encouraging applicants to develop scopes of work that achieve minimum energy savings.

Energy efficiency provides multiple benefits and supports other goals beyond reducing energy use, such as increasing resiliency (e.g., ensuring passive survivability during power outages), lowering property operating and resident energy costs, creating healthier living environments (e.g., reducing indoor air pollutants), improving resident comfort, and supporting building electrification and renewables (e.g., (e.g., reducing size and cost of needed equipment and reducing energy loads to mitigate costly electric infrastructure upgrades). Efficiency measures typically provide the greatest return on investment in lower energy bills.

There are several examples of affordable multifamily energy efficiency programs that require scopes of work to achieve a minimum energy savings level. The California Low Income Weatherization Program (LIWP) requires projects funded solely through program incentives to achieve a minimum of 15% energy savings. LIWP projects co-funded through other energy efficiency and/or affordable housing programs must achieve at least 25% energy savings. In Delaware, projects must exceed 10% energy savings to qualify for funding. The New York Multifamily Performance Program will only fund scopes of work that achieve at least 15% energy savings.

A minimum energy efficiency savings target should be implemented flexibly to not disadvantage applicants pursuing non-energy-related goals or applicants that do not have access to technical assistance.

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[2] Jeremy S. Hoffman, Vivek Shandas, and Nicholas Pendleton, "The Effects of Historical Housing Policies on Resident Exposure to Intra-Urban Heat: A Study of 108 US Urban Areas", Climate 8(1), 12 (November 13, 2020).
[3] Lily Katz, "A Racist Past, a Flooded Future: Formerly Redlined Areas Have $107 Billion Worth of Homes Facing High Flood Risk—25% More Than Non-Redlined Areas," Redfin News, March 14, 2021, https://www.redfin.com/news/redlining-flood-risk/.

- Relatively energy-efficient buildings pursuing climate resiliency measures should not be required to meet a minimum savings level.
- Technical assistance will be required to help capacity-constrained housing providers achieve higher energy savings. If technical assistance is not available, HUD should waive the minimum energy savings requirement (See below for recommendations for providing technical assistance).

2. Advance high-efficiency, all-electric construction

The GRRP should support electrification to the extent that electrification and the energy efficiency scope do not increase residents' utility bills. Electrification is a crucial decarbonization strategy. Supporting electrification will help ensure affordable housing residents do not bear the burden of escalating gas costs. Removing fossil-fuel-burning equipment (especially gas-burning stoves) eliminates harmful indoor pollutants. Installing heat pumps increases resiliency to extreme heat by adding high-efficient air conditioning.

HUD can advance high-efficiency, all-electric construction by incentivizing a broad range of measures to support the adoption of high-efficiency electric equipment to electrify fossil-fuel burning end-use technologies and/or replace inefficient electric resistance heat:

- Require all project proposals to consider installing high-efficiency heat pumps (including heat pump water heaters). Building owners that cannot incorporate high-efficiency heat pumps should have to justify why doing so is not in the best interest of residents.
- Prohibit the use of funding to install energy-inefficient electric resistance heating systems.
- Provide funding to conduct electrification-specific audits and electrical system upgrades that will be necessary to accommodate added electrical load (e.g., wiring, circuit panel upgrades, service lines, transformers).
- Offset the cost of replacing gas-burning stoves with electric or induction stoves.
- Encourage the installation of solar with electrification projects to minimize utility costs.

3. Advance renewable energy and battery storage

HUD should emphasize the installation of renewable energy and battery storage ("solar+storage"). Solar+storage helps ensure that operating costs do not increase due to electrification and improves resiliency. Resilience Hubs with solar+storage provide non-energy community and equity benefits during emergency events that are caused by or coincide with grid outages.

Incentives should be structured to overcome solar+storage funding challenges in locations that do not have existing incentive programs or utility rates that increase project cost-effectiveness.

- To make solar + storage viable in markets with fewer available incentives, funding amounts should be based on the kW solar system size rather than the battery size. For example, the Maryland Energy Administration provides $3,000/kW for each awarded solar + storage project.
- Higher incentives are also required for solar+storage projects in areas that do not have time-of-use (TOU) rates. Utility savings from battery projects are higher when owners pay TOU rates, making projects more financially feasible. HUD should provide higher incentives to projects where TOU rates do not exist to increase financial feasibility.

4. Support proper building operations and maintenance

HUD should provide funding and/or technical assistance to help building owners manage and maintain new energy equipment. Proper maintenance is necessary to ensure continued energy and emissions savings. HUD should offer GRRP participants direct technical assistance and/or a more substantial management add-on fee incentive than currently available to Better Building Challenge participants to provide an ongoing funding source for training property management staff.

5. Fund health and safety upgrades

GRRP should provide funding to remediate health and safety deficiencies and support minimum healthy housing standards. Addressing health and safety barriers in affordable multifamily properties may be necessary to install specific energy-saving measures. Funding healthy home interventions and energy-saving measures maximize resident and societal benefits through improved indoor air quality and occupant safety and comfort.

Eligible health and safety measures should include the following:

- Roofing or building structure problems
- Mold and mildew issues caused by gutters, downspouts, flashing, sump pumps, etc.
- Moisture problems caused by biological contaminants, e.g., raw sewage, rotting wood
- Fuel leaks, including unsafe gas ranges/ovens
- Combustion gas issues, e.g., back drafting, high in flue or ambient carbon monoxide levels
- Electrical hazards, including knob & tube wiring
- Hazardous lead-based paint levels
- Asbestos on HVAC systems, distribution, venting, and other surfaces, and vermiculite insulation that will be disturbed during retrofit
- Formaldehyde, VOCs, flammable liquids, and other air pollutants posing risks to workers/occupants
- Injury prevention measures, e.g., repairing stairs and handrails
- Pest infestations
- Replacement of knob and tube wiring

- Code-compliant ventilation for each bathroom and kitchen if the existing ventilation system is not operational to appropriate specifications
- In-unit portable HEPA-filter air cleaners that meet low-ozone emission testing/certification or MERV 13+ rated filter required for any heating system, cooling system, or air handler attached to a forced air ducted system and/or a ventilation system that brings outdoor air into the building located within EPA Green Book nonattainment area status for the PM-2.5 (2012) or PM-10 (1987) National Ambient Air Quality Standards (NAAQS).

Cost Effectiveness and Leveraging

1. Do not require projects to meet a cost-effectiveness test

Applying a cost-effectiveness test to projects is complicated by the lack of certainty about the value of benefits from the range of measures that are likely to be installed, including resilience measures that do not provide an immediate financial return. Many of the benefits of these projects will also include health benefits that are not easily quantifiable. Developing a cost-effectiveness methodology that captures the total value of the expected benefits will be overly complicated and burdensome to apply. It will likely unfairly shortchange the full extent of benefits provided and discourage applicants.

2. Encourage but do not require cost-leveraging

Applying a cost-leveraging requirement will unfairly disadvantage specific projects that may be most in need of resources. Cost-leveraging requirements will also add complexity and prolong the time it will take for projects to be completed. Each of the following leveraging sources presents challenges:

- *Local utility energy efficiency programs* – While utility programs are a good source of leverage in states that value energy efficiency, many states like West Virgina and Mississippi provide few energy efficiency incentive programs. Requiring leveraging would unfairly block residents and building owners in these states with no access to viable sources of leveraging funds.
- *Owner equity* - The upfront investment for owners can be costly, especially for small property owners making it less likely for them to take advantage of the program. By reducing the amount of the upfront investment, we can qualify a larger pool of owners. Additionally, by reducing the number of investment scenarios, we can simplify the application process and allow the money to get out faster.
- *IRA funding* - While IRA creates several spending programs to support decarbonization, it is unknown when these funds will become available. In addition, these programs do not guarantee that affordable multifamily housing can access the funds. Since most funds will be distributed at the state and local level, the degree to which the funds will be available and targeted to affordable multifamily housing could vary significantly by location.

- *Weatherization Assistance Program funding* – HUD and DOE have made significant progress streamlining the eligibility process for HUD-assisted housing to access WAP funding. However, many state and local WAP agencies have not addressed other challenges to multifamily weatherization, including increasing the technical capacity of providers to evaluate and implement weatherization measures in large multifamily buildings.

If cost-leveraging is required, technical assistance should be available to help building owners identify and apply for other funding sources. Requiring building owners to identify and apply to multiple funding sources creates a burden that could discourage participation in the GRRP. Energy efficiency programs that successfully leverage other funding sources typically assist building owners in identifying and applying for funding to reduce the administrative burden on owners. In California, staff of the Low Income Weatherization Program spends considerable time identifying other funding sources as part of the scope development process. Technical advisors develop familiarity with regional, utility, and statewide energy efficiency, battery storage, and renewable energy programs to assist owners in layering additional resources into projects to encourage maximum impact and reduce property owner administrative burden.

Supporting Greater Access to Utility Data

1. Encourage utilities to make energy consumption data available

HUD should conduct a robust utility benchmarking outreach and education campaign to state Public Utility Commissions (PUC), consumer advocates, stakeholders, and utilities.

The most significant barrier multifamily housing providers face in collecting energy and water consumption data is the reluctance of utility companies to provide the data due to concerns about resident privacy, IT system limitations, and limited staff and resource capacity. HUD should begin by convening a working group to write model regulatory language for PUCs requiring utilities to create data request programs with appropriate privacy safeguards. At a minimum, utilities should make anonymized aggregated whole-building data available to building owners and unit-level data available to residents, including consumption and cost data. The working group could Include USDA, DOE, EPA, and key industry stakeholders.

Related to this, the North American Energy Standards Board (NAESB) has established a national standard for utilities to provide energy usage data in a consumer-friendly format. This NAESB standard forms the core of the Green Button Initiative. HUD could also work with Green Button or a similar group to develop a dedicated multifamily data collection and access protocol.

2. Establish a phased-in benchmarking requirement for HUD-assisted multifamily housing properties

Utility benchmarking is critical for building owners to make informed investments in energy upgrades and for policymakers or lenders to plan future budget needs or verify investment returns. Yet most multifamily providers do not benchmark. The IRA presents a rare

opportunity for HUD to launch a long overdue benchmarking requirement for its assisted housing portfolio.

HUD can update and reissue Federal Register Notice FR–5913–N–27, which would enact a utility benchmarking requirement for HUD's assisted housing providers.

- Beginning in June 2025, HUD-assisted multifamily buildings ≥ 50,000 square feet and 30 or more residential units should be required to provide HUD with selected utility consumption metrics. The requirement would gradually apply to smaller buildings over six years.
- HUD-assisted housing providers should report data annually rather than every third year, as stated in HUD's FR–5913–N–27 Notice. Since the Notice was issued in 2016, many jurisdictions have adopted annual reporting requirements. Moreover, triennial reporting does not enable housing providers to develop the expertise required to collect, analyze, and report the data. It does not provide the proper market signal to utilities and the industry to build out benchmarking services.

3. Provide flexibility on the type of energy consumption data required and methods for collecting it

Flexibility is necessary to balance benchmarking requirements with limiting the burdens on multifamily housing providers.

- HUD should accept energy and water metrics calculated using either whole building data or a combination of whole owner-paid utility data and sampled tenant-paid utility data when whole building data is unavailable.
- Sampled tenant data should meet or exceed the sampling protocol adopted by the Better Buildings Challenge.

4. Provide a management add-on fee or other financial support to offset benchmarking costs

HUD-assisted multifamily housing providers have tight operating budgets with little capacity to absorb the costs for internal staff or third-party benchmarking service providers. HUD can provide financial support by creating a management add-on fee similar to that available to Better Buildings Challenge multifamily housing participants, including:

- $2/unit/month for utility data collection, entry, technical support
- $2/unit/month for installation/use of benchmarking software
- Comparable support for properties not eligible for a management add-on fee

5. Create a comprehensive benchmarking training and technical assistance program and platform for multifamily housing providers

Multifamily housing providers will need substantial training and technical assistance (T&TA) to build staff capacity, address numerous barriers and create best practice processes for data collection, entry, analysis, and reporting. HUD should provide wrap-around services to publicize benchmarking requirements, provide online training, identify TA and capacity-

building needs, and provide more intensive targeted TA and quality control measures. The T&TA program should include the following:

Front end:

- Provide communications and outreach to publicize the new requirements.
- Provide a series of online self-paced training modules on the value, challenges, and solutions to benchmarking multifamily properties, including training on Portfolio Manager specific to multifamily buildings.
- Create a comprehensive platform on the HUD Exchange containing training resources, up-to-date policy guidance on benchmarking requirements, links to industry support, and news and announcements (similar to the design of HUD's Housing Counseling platform).

Middle:

- Provide a benchmarking Help Desk to triage basic questions and identify complex needs.
- Provide direct TA funds for criteria-specific HUD customers with complex challenges.

Back-end:

- Provide "spot-check" quality control oversight of benchmarking reporting to ensure compliance and accuracy of utility data.

6. Build an internal HUD-USDA building performance data system to help agencies use and track energy consumption data

Portfolio Manager is not a customer relationship management database that could be used internally by HUD and USDA to analyze macro-level utility data of its assisted housing portfolio. HUD and USDA should build an integrated utility funding and benchmarking platform with broad capabilities to automate energy and water reporting, analysis, funding calculations, accounting oversight, retrofit planning, and goal tracking. Technical specifications and wireframe designs were prepared for this system in 2015 with the assistance of DOE's NREL team, EPA's Portfolio Manager team, and GSA's 18F team.

7. Provide data transparency to support research

HUD should provide public access to appropriately anonymized benchmarking data so that housing providers, governments, researchers, and others can use the data sets to inform policy and investment decisions. HUD should work with the Energy Information Agency to ensure that multifamily housing data is readily available as a subset of Residential Energy Consumption Survey data. Finally, HUD's benchmarking tools and reporting system should be made available for voluntary use by public housing authorities. Many PHAs will find value in the process, and the compiled data will have comparable benefits for highlighting effective strategies and savings opportunities.

Equitable Implementation of Retrofits

1. Provide technical assistance to building owners through cooperative agreements with technical assistance providers

Affordable multifamily owners and managers have limited staff capacity and resources to plan for and implement energy efficiency improvements. They often must deal with competing building needs and priorities. They will require technical resources and flexibility to complete a whole-building energy retrofit.

Property owners and managers generally do not have the expertise to conduct audits and evaluate which energy efficiency measures make the most sense to implement. They may also be unfamiliar with finding qualified construction contractors to make efficiency improvements. If they commit money and time to complete a retrofit, building owners will need assurances that the measures selected and implemented will produce meaningful energy savings. A streamlined process from application to quality assurance is necessary to ensure that the program is easy to use and achieves maximum savings.

At owners' request, HUD should offer a network of technical assistance providers to work with grantees to provide comprehensive technical assistance and project management services to building owners to help owners:

- develop scopes of work;
- identify and apply to other funding sources if leveraging is required;
- prepare specification and bid documentation;
- identify contractors or permit owners to use their contractors if preferred;
- oversee construction management and quality assurance; and
- assist owners with post-construction monitoring.

2. Provide financial incentives to offset staffing costs

Due to split incentives, utility allowance policies, and limited-to-no payback from resiliency measures, building retrofits are unlikely to generate sufficient financial savings to recoup staffing costs involved with coordinating and overseeing project implementation. Like the 2009 Green Retrofit Program (GRP), HUD should provide financial incentives to building owners to offset staffing costs. In 2009, GRP owner incentives were the lesser 4% of project costs or $40,000. Many GRP participants have reported that the incentive was insufficient to cover staff costs. HUD should consider increasing this incentive to 7-10% of project costs.

3. Limit owner's cash flow exposure

Limited cash flow is a significant barrier to affordable housing owners undertaking whole-building energy retrofits. Building owners do not have access to capital to pay for retrofit costs upfront or to bridge costs throughout the retrofit process, which could last up to 36

months or longer[4], limiting their ability to participate in programs that require an outlay of funding reimbursed after the project is completed. HUD should deposit GRRP funds into a reserve and allow building owners to draw down expenses at key project milestones. A portion of the award should be available to building owners early in the project before construction begins to cover pre-development costs.

4. Provide flexible funding structures

Like the GRP, owners should have the option for funding to be structured as grants or soft loans depending on the structure most compatible with their property's financing situation. Providing flexibility will help HUD to disburse funding quickly. A grant mechanism that allows project sponsors to receive grants and then loan the funds into the deal will help to speed up securing investor consent and avoid tax liabilities. Structuring the funds as a soft loan may be preferred if the project is part of a recapitalization tax credit deal. Loans should be provided in the form of 0% interest, deferred payment soft loans since the retrofit project is unlikely to generate sufficient financial savings to allow owners to repay a loan.

5. Require extended affordability

To ensure that residents benefit from these investments, HUD should require owners to extend the affordability of the property for an additional 15 years.

Coordinating Resilience Investments

1. Require all applicants to assess resiliency opportunities and encourage incorporating at least one resiliency measure (or more) in their project design.

Program applicants should utilize existing tools, including but not limited to Federal Emergency Management Agency's (FEMA) Risk MAP, National Oceanic and Atmospheric Administration's (NOAA) Billion-Dollar Weather and Climate Disasters map, NOAA's Affordable Housing/Resilience Story Maps, Enterprise's Portfolio Protect, and/or FloodFactor to assess climate-related risk and incorporate design features that are responsive to those risks. Resilience measures should include the installation of electric heat pump cooling systems for areas facing increased heat; wet and dry floodproofing, the elevation of critical systems, improved site drainage for areas facing increased flooding; more fire-resistant roofing and/or building materials for areas facing increased risk of wildfires; and building envelope efficiency, renewable energy storage, critical backup systems, and community resilience spaces.

[4] Reasons for this timeline include project timing challenges, such as significant difficulty putting together a capital stack for financing which requires that consents are secured from multiple lenders, and current industry supply-chain issues, particularly in electrical and power equipment.

2. HUD should consider property-level retrofits in the context of broader community-wide investments that reduce the risk for residents and the property owner.

Climate resilience investments are more difficult to finance because they do not directly and immediately generate cost savings for property owners like water- or energy-efficiency investments. Yet, they are critical to reducing the risk exposure for residents who can least bear the cost of climate impacts. The effectiveness of climate resilience investments proposed by applicants should align with and complement planned community-wide investments in resilience funded through other federal programs (specifically HUD's Community Development Block Grant-Mitigation, FEMA's Hazard Mitigation Grants, and Building Resilient and Inclusive Communities grants). Where possible, applicants should be encouraged but not required to describe how building-level proposed investments leverage other community-wide investments in resilience -- such as greater integration of green infrastructure to reduce flooding or efforts to strengthen building code requirements for new construction -- in ways that will reduce the risk for building residents. HUD program offices that support resilience are encouraged to collaborate in the implementation of GRRP and with partners in FEMA to the extent practicable.

Again, we appreciate the opportunity provided by HUD to help shape and inform the design and implementation of this critical program. We recognize the crucial opportunities it presents to deliver more equitable climate benefits for affordable housing residents and to invest in practices that can lead the way for broader adoption across the affordable housing industry. We look forward to any questions or comments you may have.

Signed,

Todd Nedwick and Danielle Arigoni,
National Housing Trust

American Council for an Energy-Efficient Economy

California Housing Partnership

Community Economic Development Assistance Corporation

Council of Large Public Housing Authorities

Ecology Center

Eden Housing

Enterprise Community Partners

Fresh Energy

Greater Syracuse Tenants Network

Housing Assistance Council

Housing Partnership Network

LeadingAge

Local Initiatives Support Corporation

Minnesota Housing Partnership

National Association of Local Housing Finance Agencies

National NeighborWorks Association

Novogradac & Company LLP

Piedmont Housing Alliance

Preservation of Affordable Housing, Inc.